2015 Power Dissipated by the Cooling Towers

The cooling circuits at CERN use evaporative open cooling towers to discharge into the atmosphere the heat removed from equipment in the accelerators and in the experiments.

The Cooling Networks

Cooling networks at CERN are generally dedicated to one specific accelerator complex; the size and the number of cooling towers per complex depend on the amount of cooling power required.

<table>
<thead>
<tr>
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<th>Description</th>
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<tbody>
<tr>
<td>LHC</td>
<td>one cooling tower per even LHC Point, one in Point 1 for ATLAS, one in Point 5 for CMS and an additional tower in Point 18</td>
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<tr>
<td>SPS</td>
<td>one cooling tower close to BA6</td>
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<tr>
<td>North Area</td>
<td>one cooling tower on the Prévessin site</td>
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<tr>
<td>PS and the Meyrin Site</td>
<td>14 cooling towers are installed on the Meyrin site: they are dedicated to the PS complex and some specific equipment (e.g. POPS).</td>
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</table>

The power that has been evacuated via the cooling towers during 2015 is indicated in the following tables.
1. TOTAL LHC 548
   LHC Point 1 80
   LHC Point 18 6
   LHC Point 2 92
   LHC Point 4 117
   LHC Point 5 33
   LHC Point 6 73
   LHC Point 8 147

2. SPS 262

3. North Area 143

4. TOTAL PS – Meyrin site 109
   Building 378 2
   Building 201 5
   AD 4
   LEIR + Linac 2 & 3 5
   PSB (demineralized and chilled water) 18
   PS complex 57
   POPS 3
   EAST Area 5
   Isolde 2
   CTF3 8

Total CERN 1’062